

<b>NWS FORM E-5</b> (11-88) (PRES. BY WSOM E-41)	<b>U.S. DEPARTMENT OF COMMERCE</b> NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) <b>WFO Jackson, Mississippi</b>
<b>MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS</b>		REPORT FOR: MONTH                      YEAR <b>July                              2003</b>
TO:      Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE <b>Alan Gerard, MIC</b> <b>In Charge of HSA</b>  DATE <b>August 8th , 2003</b>

*When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOME-41)*

**Synopsis...**

*The weather for July was characterized mostly by typical scattered afternoon showers and thunderstorms throughout the state; however, the month began with the remnants of Tropical Storm Bill over east Mississippi. Rainfall totals for the 24 hour period ending at 7am on the 1st ranged from 2 to 6 inches over east and southeast sections of Mississippi. The 48 hour storm totals for Bill ending at 7am on the 1<sup>st</sup> ranged from 0.50 inches over central Mississippi to 7.50 inches over southeast and east Mississippi.*

*From the 2<sup>nd</sup> to the 10<sup>th</sup>, showers and thunderstorms were scattered over various portions of the state. On the 11<sup>th</sup> and 12<sup>th</sup>, rainfall was more widespread in the north where a weak frontal system had pushed into the area. The 13<sup>th</sup> was one of the rare days where no rainfall occurred over most areas of the HSA. From the 14<sup>th</sup> to 20<sup>th</sup>, scattered rainfall was common especially over southern and eastern sections of Misissippi. The 21<sup>st</sup> and 22<sup>nd</sup> were fairly dry.*

*A deep upper air trough with an associated cold front, uncommon for this time of year, pushed into the state on the 23<sup>rd</sup> and 24<sup>th</sup>. Rainfall amounts ranged from 1 to 3 inches over central and southern Mississippi. Little or no rainfall occurred elsewhere. Drier air moved into the area behind the front. The 25<sup>th</sup> through the 27<sup>th</sup> were dry with the exception of scattered showers over the southern sections on the 27<sup>th</sup>. The remainder of the state had isolated to scattered showers and thundershowers over the state.*

*Some heavier 24 hour rainfall totals ending at 7am over the HSA during the month were: Hattiesburg, MS 6.00 (1<sup>st</sup>); Purvis, MS 5.95 inches (1<sup>st</sup>); Sumrall, MS 4.00 inches (1<sup>st</sup>); Quitman, MS 3.91 inches (1<sup>st</sup>); Pat Harrison's Dry Creek WP, MS 3.00 inches (23<sup>rd</sup>); Hazelhurst, MS 3.00 inches (19<sup>th</sup>); Raleigh, MS 2.93 inches (23<sup>rd</sup>); Hazelhurst, MS 2.90 inches (5<sup>th</sup>). (Note: Much of the rainfall from the those stations listed as 24 hour totals on the 1<sup>st</sup> occurred on the 30<sup>th</sup> of June)*

**River and Soil Conditions...**

*Soil moisture conditions remained wet over most of the HSA during the*

month with the exception of portions of northeast Louisiana, where conditions were near normal.

Minor flooding was reported on the Upper Pearl, Black Creek in Forest County, MS, and Upper Chickasawhay River. See the June E-3 report for specific information on flood crests.

With normal to above normal soil moisture conditions and near normal rainfall forecast for the 60 to 90 day period, flood potential for HSA rivers should remain near normal to slightly above normal for the next 60 to 90 days.

Rainfall for the month of July...

<u>RIVER BASIN</u>	<u>RAINFALL</u>	<u>DEPARTURE FROM NORMS</u>
Southeast Arkansas (Chicot & Ashley counties)	1.50 to 4.50 inches	Much below to slightly above normal.
Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	1.00 to 4.00 inches northern sections  2.00 to 4.00 inches central sections  4.00 to 7.00 inches southern section	Much below to slightly above normal.  Below to slightly above normal.  Above to much above normal.
Lower Yazoo	2.25 to 5.25 inches	Much below to above normal.
Big Black	3.25 to 5.25 inches upper basin  1.75 to 5.25 inches middle basin  1.50 to 3.00 inches lower basin	Below to just above normal.  Much below to above normal.  Below to much below normal.
Homochitto/ Bayou Pierre	3.25 to 8.50 inches	Below to much above normal especially east sections.
Pearl (abv Jackson)	2.50 to 6.50 inches	Much below to much above normal especially northeast sections.
Pearl (Blo Jackson)	2.50 to 8.50 inches	Below normal northeast sections to much above normal.

Pascagoula	6.00 to 10.50 inches over the Leaf basin.	Much above normal.
	9.00 to 11.75 inches over the Black Creek basin.	Much above normal.
	4.50 to 12.50 inches over the Chickasawhay	Slightly below extreme north to much above normal elsewhere.
Tombigbee tributaries in the JAN HSA	2.75 to 9.00 inches	Much below normal to much above normal especially northeast.

The heaviest rainfall amounts in the HSA for the month were: 12.43 inches at Mize, MS; 12.30 inches at Quitman, MS; 11.78 inches at Purvis, MS; 11.11 inches at Newton Experimental Station (Newton County); 10.50 inches at Sumrall, MS; 10.26 at Hattiesburg, MS; 9.77 inches at Crystal Springs Experiment Station (Copiah County); 9.52 inches at Pat Harrison's Turkey Creek WP, MS; 9.40 inches at Crandall, MS; 9.24 inches at Pat Harrison's Dry Creek WP, MS; 9.09 inches at Pat Harrison's Big Creek WP. (Note: rainfall totals include rainfall from 7am June 30<sup>th</sup> to 7am July 1st)

Here at the Jackson WFO, the July monthly rainfall was 2.30 inches, which was 2.39 inches below normal. We had received 39.70 inches of rainfall through the end of July which was 4.44 inches above normal.

At the Meridian Key Field, the July monthly rainfall was 10.06 inches, which was 4.60 inches above normal. This ranks as the 8<sup>th</sup> wettest July since 1948. (Last month, Meridian rainfall total of 10.95 inches was the wettest June since 1948.) Meridian had received 47.29 inches through the end of July which was 9.16 inches above normal. Meridian had the 3<sup>rd</sup> wettest May through July period, 24.96 inches, since 1948.

### Mississippi River...

The Mississippi River continued to fall through July 11<sup>th</sup> and then experienced a rise through the 23<sup>rd</sup>. From the 23<sup>rd</sup> to the end of the month, the river continued to fall. The Arkansas City to Vicksburg stage fell below seasonal norms for a short time between the 5<sup>th</sup> and 10<sup>th</sup>. The Natchez stage remained above seasonal norms for entire month.

The provisional high and low stages for July are listed below:

Location	High Stage(ft)	Date	Low Stage(ft)	Date
Arkansas City, AR	21.68	07/01	11.27	07/12
Greenville, MS	34.05	07/01	22.69	07/12
Vicksburg, MS	30.38	07/01	16.59	07/15
Natchez, MS	38.30	07/01	24.12	07/15

*Products issued...*

*Total Flood Warning products issued: 2*

*Total Flood Statement products issued: 25*

*Daily Rainfall Products (RRA'S) issued 31*

*Daily River Forecast Products (RVS'S) issued: 31*

*Daily River Stage products (RVA'S) issued 31*

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Service Hydrologist*

*Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, and the Mississippi Department of Environmental Quality.*

*cc: USGS Little Rock District  
USGS Ruston District  
USCE Mobile District  
USCE Vicksburg District  
USCE Mississippi Valley Division  
USGS Mississippi District  
SRH Climate, Weather and Water Division  
LMRFC  
Pearl River Valley Water Supply District  
Hydrologic Information Center  
Southern Region Climate Center  
Pat Harrison Waterway District*